Lesson 4 Practice Problems

1. Here is a diagram showing a mixture of red paint and green paint needed for 1 batch of a particular shade of brown.

red paint (cups) ■ ■ ■

green paint (cups) ■ ■

Add to the diagram so that it shows 3 batches of the same shade of brown paint.

2. Diego makes green paint by mixing 10 tablespoons of yellow paint and 2 tablespoons of blue paint. Which of these mixtures produce the same shade of green paint as Diego's mixture? Select **all** that apply.

   A. For every 5 tablespoons of blue paint, mix in 1 tablespoon of yellow paint.

   B. Mix tablespoons of blue paint and yellow paint in the ratio $1 : 5$.

   C. Mix tablespoons of yellow paint and blue paint in the ratio 15 to 3.

   D. Mix 11 tablespoons of yellow paint and 3 tablespoons of blue paint.

   E. For every tablespoon of blue paint, mix in 5 tablespoons of yellow paint.

3. To make 1 batch of sky blue paint, Clare mixes 2 cups of blue paint with 1 gallon of white paint.

   a. Explain how Clare can make 2 batches of sky blue paint.

   b. Explain how to make a mixture that is a darker shade of blue than the sky blue.

   c. Explain how to make a mixture that is a lighter shade of blue than the sky blue.

4. A smoothie recipe calls for 3 cups of milk, 2 frozen bananas and 1 tablespoon of chocolate syrup.

    a. Create a diagram to represent the quantities of each ingredient in the recipe.

    b. Write 3 different sentences that use a ratio to describe the recipe.
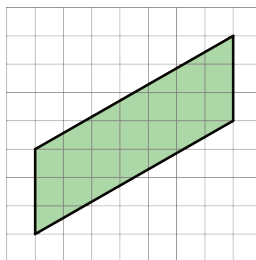
(From Unit 2, Lesson 2.)

5. Write the missing number under each tick mark on the number line.
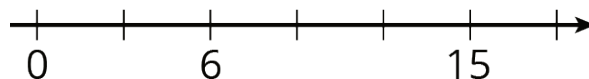
(From Unit 2, Lesson 1.)

6. Find the area of the parallelogram. Show your reasoning.

(From Unit 1, Lesson 4.)

7. Complete each equation with a number that makes it true.

a. $11 \cdot \frac{1}{4} = $ _____

b. $7 \cdot \frac{1}{4} = $ _____

c. $13 \cdot \frac{1}{27} = $ _____

a. $13 \cdot \frac{1}{99} = $ _____

b. $x \cdot \frac{1}{y} = $ _____

(As long as y does not equal 0.)

(From Unit 2, Lesson 1.)

Grade 6 Unit 2

Lesson 4

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